

Notes on Bees (Hymen.: Andrenidae).

By J. CHESTER BRADLEY, Cornell University, Ithaca, New York.

TETRALONIA.

The lectotypes of *Melissodes dilecta* (♂) and of *M. speciosa* (♀) of Cresson have both been examined. In neither are the hind tibial spurs hooked. They both come from Colorado.

Several specimens in the collection of the American Entomological Society from Illinois with hooked hind tibial spurs, ♂ and ♀, stand incorrectly determined, the males by Cresson as *dilecta* and one by Viereck as *speciosa*, the females by Cresson as *speciosa*. One ♂ from "Col" and one from "Tex" both are also cospecific with the Illinois specimens.

The type of *frater* Cr. (♂), which name Robertson in 1895 thought synonymous with *dilecta*, is structurally different from the type of the latter species, as well as from the one which Robertson misidentified as *dilecta* Cr. Robertson in 1905 indicated his error in this regard and stated that the hind tibial spurs of the type of *frater* are not hooked, but still overlooked the fact that such is also the case in both *dilecta* and *speciosa*.

***Tetralonia hamata* n. sp.**

♂.—General appearance and coloration of the type of *dilecta* Cresson, but the vestiture of the dorsum of the thorax less dense, and the vestiture of the second (morphologically 3rd) tergite similar to that of the first but shorter, without the white fascia of *dilecta*. Hind tarsal spurs very strongly hooked. Last sternite without a basal lateral fossa but with a strong truncate peg-like process at the middle of each lateral margin, the two divergent but sub-erect. L. 14 mm.

♀.—General appearance and color of the type of *speciosa* Cresson, but the vestiture of the hind tibiae tends to be paler than that of the metatarsus, which is not the case in *speciosa*. Hind tibial spurs hooked, but less strongly so than in the males. The pygidial plate is more broadly rounded than in *speciosa*. L. 15 mm.

Holotype ♂, *Allotype* ♀, 6 ♂ *paratypes* and 4 ♀ *paratypes*, all from ILLINOIS, but without closer indication of locality; one ♂ *paratype* from "TEX" and one ♂ *paratype* from "COL," bearing labels as *paratypes* of *dilecta*. All are in the collection of the American Entomological Society.

Under the names *speciosa* and *dilecta* what is doubtless this

species has been recorded from Carlinville and near Chicago, Illinois, as well as from Indiana.

I have seen the true *dilecta* from Colorado, Texas and South Dakota, but whether records from Kansas and New Mexico are *dilecta* or *hamata* is uncertain.

In comparison with *hamata*, it may be stated that the ♂ of *dilecta* has a lateral fossa on the basal half of the last sternite, abruptly terminated internally, and lacks the peg-like processes of the lateral margin.

Professor T. D. A. Cockerell (Trans. Amer. Ent. Soc. '06, 32:94) stated that *dilecta* may be easily distinguished from *frater* and *speciosa* by its hooked spurs; he informs me that he based this statement on a paratype loaned to him at the time and which must have been one of the two that I am now making paratypes of *hamata*. It is to be regretted that when Mr. Cresson later selected the lectotype of *dilecta* he did not select the Texas specimen, as then the species would stand as defined by Professor Cockerell, and as understood by Robertson. But since Cockerell, '06, cannot be construed as making a prior selection of a lectotype (he did not in fact know that two species were involved in the type series, nor even mention in print that he had a type), Mr. Cresson was at liberty to make what selection he saw fit and his published designation must be honored, if we are to attach any weight at all to the idea of lectotype.

PSEUDOPANURGUS (P.) ILLINOIENSIS (Cresson). *P. compositarum* Robertson seems to be a synonym. The type (♂) of *illinoiensis* runs to *compositarum* in Robertson's key to Illinois species. I have also compared with it a ♀ "metatype" of *compositarum* in the collection of the American Entomological Society labelled by Viereck.

CALLIOPSIS ABDOMINALIS Cresson. *C. tricolor* Ckll. is at best a subspecies. There are two females in the collection of the American Entomological Society both from New Jersey. The female differs from other eastern species in having both metanotum and propodeum uniformly densely granularly punctate, the metanotum without hair. The male differs from our other species in having the 5th and 6th sternites simple, instead of the fifth with a median process which projects posteriorly between two processes of the sixth, these sometimes (*coloradensis*) recurved.